Last name	First name	SID
Short questions (1 point each, 20 podon't misinterpret them (e.g. by miss	,	1 ,
1. Hybrid autos are useful because	7. 5	Γhe Nagasaki bomb was based on
() they don't use gasoline	, .	() U-235
() they use less gasoline		() U-238
() they use solar energy		() Pu-239
() they do not emit carbon		() H-2 and H-3
dioxide		() 11 2 unu 11 3
G.201.12.00	8. I	Energy from the sun is from
2. Terminal velocity for humans is ab		() hydrogen fission
() 10 miles per hour	, 0 0.0	() plutonium fission
() 100 miles per hour		() uranium fusion
() 1000 miles per hour		() hydrogen fusion
() 100 meters per second		() 13 11 0 80 11 11 11 11
()	9. 7	The most dangerous part of fallout is:
3. Energy in butter, compared to		() carbon dioxide
flashlight battery:		() plutonium
() about the same		() fission fragments
() 10x less		() lead
() 10x more		
() 1000 times more	10.	The typical velocity of water in your
()		blood (the speed that molecules
4. An hour of very hard exercise uses		shake) is about
energy in how much fat?		() 1 mile per 5 seconds
() 3 ounces		() 186,000 miles per second
() 1 pound		() 1 cm per second
() 2 pounds		() 0
() 10 pounds		
., .	11.	Solar power is about
5. A typical nuclear power plant is		() 10 watts per square meter
() about 1 kilowatt		() 10 ³ watts per square meter
() about 1 megawatt		() 10 ⁶ watts per square meter
() about 1 gigawatt		() 10 ⁹ watts per square meter
() about 1 terrawatt		
	12.	Ice melts at what temperature? Mark
6. When a nuclear reactor loses its		ALL that are correct.
coolant, what happens?		() 32 F
() the chain reaction stops		() 0 C
() the radioactivity stops		() 273 K
() the fission fragments are lo	ost	()0 K
() heat is no longer produced		

13. A refrigerator operating in a room () warms the room () cools the room () has no effect on the room () removes water vapor from the room	19. An astronaut in orbit is weightless because () he is above the Earth's gravity () the moon balances the Earth's gravity () he is constantly "falling" () He isn't. He is "massless."
14. The pipe in a pipe bomb is there () because its fragments do most of the damage () only to hold the explosive () to contain the explosion and minimize the damage () to make the explosion go out the ends	20. Volcanic heat comes from () hydrocarbons () fission () fusion () radioactive decay
 15. To make hydrogen undergo fusion, the main thing needed is () carbon to act as a catalyst () very high temperature () a moderator () a critical mass 	
16. Depleted uranium is used () in dirty bombs () in artillery shells () in nuclear reactors () in homemade bombs	
17. Yucca Mountain will be used () for a solar power plant () as a site for wind mills () to extract geothermal energy () to store nuclear waste	
18. Geologists search for oil by trying to measure its () gravity () gamma rays () beta rays () microwaves	

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 11. Energy in butter, compared to flashlight battery: () about the same () 10x less () 10x more () 1000 times more 12. An hour of very hard exercise uses the energy in how much fat? () 3 ounces () 1 pound () 2 pounds () 10 pounds 	 18. The typical velocity of water in your blood (the speed that molecules shake) is about 1 mile per 5 seconds 186,000 miles per second 1 cm per second 0 19. Solar power is about 10 watts per square meter 10³ watts per square meter 10⁶ watts per square meter 10⁹ watts per square meter
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